Appln. No. 10/047,032 Amdt. dated December 7, 2005

Reply to Office Action dated October 20, 2005

REMARKS/ARGUMENTS

Reconsideration of the present application, as amended, is respectfully requested.

The October 20, 2005 Office Action and the Examiner's comments have been carefully considered. In response, the claims are amended for clarification purposes and to remove reference numerals, and remarks are set forth below in a sincere effort to place the present application in form for allowance. amendments are supported by the application as originally filed. Therefore, no new matter is added.

Inasmuch as the present Amendment raises no new issues for consideration, and, in any event, places the present application in condition for allowance or in better condition for consideration on appeal, its entry under the provisions of 37 CFR 1.116 is respectfully requested.

PRIOR ART REJECTIONS

In the Office Action, claims 1, 2, 4-6, 8-10, 12-14, 16-18 and 20 are rejected under 35 USC 102(e) as being anticipated by USP 6,137,915 (Chai). Claims 3, 7, 11, 15 and 19 are rejected as

being obvious and unpatentable over Chai in view of USP 5,384,793 (Zinser).

The Examiner's rejections of the claims are respectfully traversed on the grounds that Chai does not disclose, teach or suggest the claimed invention.

A feature of the invention is that first and second encoded frequency band signals derived from a single input signal are decoded by separate decoders (e.g., decoders 26, 28 as shown in Fig. 2) and then combined to provide a single output signal (e.g., via a combiner 30 as shown in Fig. 2). Prior to combining the decoded frequency band signals (via the combiner 30), if a second decoded frequency band signal is not available, it is reconstructed from the first decoded frequency band signal by, e.g., a reconstructor 48 as shown in Fig. 2.

Another feature of the invention set forth in claims 1 and 9 is that when deriving the first and second encoded frequency band signals, the single input signal is split (e.g., by a splitter 20 as shown in Fig. 2), into first and second frequency band signals which are separately encoded.

The cited prior art does not disclose, teach or suggest all of the features of the present claimed invention.

Chai does not disclose a splitter for splitting up a single input signal on a single input line into at least first and second frequency band signals and first and second encoders for

encoding a respective one of the first and second frequency band signals. The Examiner referred to Fig. 2, items 220₁, 220₂, ..., 220_n, and col. 3, lines 28-35 and lines 53-64 to support the rejection. These portions relate to the presence of multiple image/video encoders each of which receives a video or image and produces a bitstream therefrom so that a plurality of elementary bitstreams can be produced. There is absolutely no mention of splitting an input video or image based on frequency band and encoding each frequency band signal by means of a separate encoder.

Chai also does not disclose first and second decoders for decoding a respective one of first and second encoded frequency band signals. The Examiner referred to Fig. 2, items 270, 275, 290, 295 and col. 4, lines 14-22 to support the rejection. Chai shows decoding an image or video signal via an image/video decoder 270 to produce a video output signal 275 and separately decoding an audio signal via audio decoder 290 to produce an audio output signal 295.

Chai cannot teach decoding two encoded frequency band signals derived from a common input signal and using two separate decoders. If, as the Examiner implies, the audio encoder of Chai is optional and only one or more image/video encoders are present, the presence of the audio decoder is also optional since it depends on the presence of the audio encoder, i.e., both are

present or both are not. Obviously, it is not possible to generate an audio signal from only the image or video input so that in the absence of the (optional) audio encoder and decoder, Chai would include only a single decoder for decoding the image or video signal and not two encoders as in the present invention.

Chai also does not mention a combiner for combining the decoded signals from the decoders into a single output signal. The Examiner referred to Fig. 2, items 270, 275, 290, 295 and col. 4, lines 14-22 to support the rejection. In Chai, separate video signals 275 and audio signals 295 are produced and there is no disclosure of a combined output signal obtained via a combiner or adder as in the invention.

Furthermore, with respect to claim 17, this claim is directed to a speech decoder, i.e., a decoder for decoding speech which is a type of audio signal. The speech decoder includes two decoders which decode different frequency band speech signals derived from a single input speech signal, i.e., multiple decoders are provided and each decodes a part of the input speech signal based on frequency. Chai shows only a single audio decoder.

Zinser also does not disclose, teach or suggest the features of independent claims 1, 5, 9, 13 and 17, e.g., multiple decoders producing decoded frequency band signals which are combined into a single output signal.

In view of the foregoing, independent claims 1, 5, 9, 13, and 17 are patentable over Chai under 35 USC 102 as well as 35 USC 103, and over Chai in combination with Zinser under 35 USC 103.

Claims 2-4, 6-8, 10-12, 14-16 and 18-20 are either directly or indirectly dependent on claim 1, claim 5, claim 9, claim 13 or claim 17 and are patentable over the references of record in view of their dependence on claim 1, claim 5, claim 9, claim 13 or claim 17 and because the references of record do not disclose, teach or suggest each of the limitations set forth in claims 2-4, 6-8, 10-12, 14-16 and 18-20.

In view of the foregoing, it is respectfully submitted that the Examiner's rejections of claims 1-20 under 35 USC 102 and 35 USC 103 have been overcome and should be withdrawn.

Entry of this Amendment under the provisions of 37 CFR 1.116, allowance of the claims and the passing of this application to issue are respectfully solicited.

If the Examiner disagrees with any of the foregoing, the Examiner is respectfully requested to point out where there is support for a contrary view.